

## EAST Search History

## EAST Search History (Prior Art)

| Ref # | Hits | Search Query   | DBs   | Default Operator | Plurals | Time Stamp          |
|-------|------|--|---|------------------|---------|---------------------|
| L1    | 1    | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and 455/266.cds. and (frequency adj3 synthesizer) with (scal\$3 with (limit\$3 or buffer or multipl\$4 or divid\$3))                                | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2010/02/26<br>21:31 |
| L2    | 4    | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and 455/266.cds. and (frequency near3 synthesi\$6) with (switch\$4 select\$4 mux) and (scal\$3 with (limit\$3 or buffer or multipl\$4 or divid\$3)) | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2010/02/26<br>21:32 |
| L3    | 19   | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and 455/266.cds. and (frequency near3 synthesi\$6) with (switch\$4 select\$4 mux) and (limit\$3 or buffer or multipl\$4 or divid\$3)                | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2010/02/26<br>21:32 |
| S1    | 0    | "10821531"   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/03/06<br>15:59 |
| S2    | 42   | (akbar near ali).in.   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/03/06<br>16:05 |
| S3    | 1    | (akbar near ali and young).in.   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/03/06<br>16:01 |
| S9    | 9620 | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and 455/75-76,73,118,119,131,295,296,313-316,205-216,180.3,183.1-187.1,188.1-191.3,255-265.cds.   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/03/13<br>10:16 |
| S10   | 369  | S9 and switch\$3 same first same second same (pll or synthesi\$6)  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/03/06<br>16:52 |
| S14   | 186  | S9 and switch\$3 with (first with second) with (pll or phase adj lock\$3 or synthesi\$6)   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/03/06<br>17:09 |
| S15   | 90   | S9 and switch\$3 same first near3 (pll or phase adj lock\$3 or synthesi\$6) same second near3 (pll or phase adj lock\$3 or synthesi\$6)  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/03/07<br>13:12 |

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|-----|------|---|---|----|----|---------------------|
| S16 | 457  | ((@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and switch\$3 with (first near3 (pll or phase adj lock\$3 or synthesi\$6) same second near3 (pll or phase adj lock\$3 or synthesi\$6))  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/07<br>15:35 |
| S17 | 9620 | ((@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and 455/75-76,73,118,119,131,295,296,313-316,205-216,180.3,183.1-187.1,188.1-191.3,255-265. ocls.   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/13<br>18:11 |
| S18 | 90   | S17 and switch\$3 same first near3 (pll or phase adj lock\$3 or synthesi\$6) same second near3 (pll or phase adj lock\$3 or synthesi\$6)  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/07<br>13:13 |
| S19 | 399  | S16 not S18   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/07<br>13:25 |
| S20 | 189  | S19 and switch\$3 near6 (channel or frequenc \$3)   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/07<br>15:27 |
| S21 | 2    | "5452290".pn.   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/07<br>15:28 |
| S22 | 13   | ("4144412"   "4722083"   "4742512"   "4783779"   "4785450"   "4819227"   "4870408"   "4955082"   "4965798"   "5103445"   "5134615"   "5197125"   "5241542").PN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/03/07<br>15:31 |
| S23 | 21   | ("4144412"   "4722083"   "4742512"   "4783779"   "4785450"   "4819227"   "4870408"   "4955082"   "4965798"   "5103445"   "5134615"   "5197125"   "5241542").PN. OR ("5452290").URPN.  | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/03/07<br>15:32 |
| S24 | 8    | ("5452290").URPN.   | USPAT   | OR | ON | 2007/03/07<br>15:32 |
| S27 | 123  | ((@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and (switch\$3 near4 (quick\$3 or rapid\$3 or fast or speed\$3) near5 (channel or frequenc\$3)).ti.ab. and (pll or phase adj lock\$3 adj loop) and synthesi\$6 near3 frequenc\$3  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/07<br>16:19 |
| S28 | 110  | ((@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and (switch\$3 near7 (quick\$3 or rapid\$3 or fast or speed\$3) near7 (channel or frequenc\$3)).ti.ab. and (pll or phase adj lock\$3 adj loop) with synthesi\$6 near3 frequenc\$3 | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/07<br>16:24 |
| S29 | 17   | S28 not S27   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/07<br>16:20 |

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|-----|-----|---|---|----|----|---------------------|
| S30 | 1   | (takenouchi near tadashi and sekido near tetsuya).in.   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/07<br>17:01 |
| S31 | 347 | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and 455/75-76,73,118,119,131,295,296,313-316,205-216,180.3,183.1-187.1,188.1-191.3,255-265. ocls. and (frequency adj3 synthesizer) and buffer  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/07<br>18:50 |
| S32 | 23  | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and 455/75-76,73,118,119,131,295,296,313-316,205-216,180.3,183.1-187.1,188.1-191.3,255-265. ocls. and (frequency adj3 synthesizer) with (scal\$3 with (limit\$3 or buffer or multipl\$4 or divid\$3))  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/08<br>09:12 |
| S33 | 3   | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and 455/75-76,73,118,119,131,295,296,313-316,205-216,180.3,183.1-187.1,188.1-191.3,255-265. ocls. and (frequency adj3 synthesizer) same scal\$3 same (limit\$3 or buffer) same multipl\$4 same divid\$3  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/07<br>19:02 |
| S34 | 2   | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and (frequency adj3 synthesizer) same ratio same integer same non\$integer and (limit\$3 or buffer or multipl\$4 or divid\$3) and square near2 wave  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/08<br>11:09 |
| S35 | 38  | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and (frequency adj3 synthesizer).ti.ab. and ratio same integer same non\$integer and (limit\$3 or buffer or multipl\$4 or divid\$3)  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/08<br>11:37 |
| S36 | 30  | ("20030043950"   "20040017841"   "4409563"   "5259007"   "6005443"   "6009126"   "6011959"   "6072996"   "6124763"   "6134452"   "6148184"   "6181212"   "6188880"   "6195539"   "6205183"   "6208875"   "6215362"   "6226509"   "6229996"   "6243428"   "6265917"   "6278867"   "6288616"   "6292474"   "6298226"   "6348830"   "6405024"   "6442380"   "6484038"   "6490440").FN. | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/03/08<br>11:29 |
| S37 | 67  | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and (frequency adj3 synthesizer with (frequencies or bands)).ti.ab. and ratio and integer and non\$integer and (limit\$3 or buffer or multipl\$4 or divid\$3)  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/08<br>11:52 |
| S38 | 268 | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and (frequency adj3 synthesizer with (plural\$5 or reference or bands)).ti.ab. and (integer or non\$integer) and (limit\$3 or buffer or multipl\$4 or divid\$3)  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/08<br>12:20 |

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|-----|-----|---|---|----|----|---------------------|
| S39 | 119 | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and (frequency adj3 synthesizer with (multiband or multi adj band or (multiple or plural\$5) adj5 (frequency or reference or signal)).ti,ab. and control adj2 signal | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/12<br>17:44 |
| S40 | 5   | ("4725786"   "5220684"   "5408201"   "5497128"   "6574462").PN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/03/08<br>12:41 |
| S41 | 5   | ("3332038"   "3379992"   "4659999").PN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/03/08<br>12:48 |
| S42 | 7   | ("5497128").URFN.   | USPAT   | OR | ON | 2007/03/08<br>12:50 |
| S43 | 24  | ("5408201").URFN.   | USPAT   | OR | ON | 2007/03/08<br>12:58 |
| S44 | 5   | ("4725786"   "5220684"   "5408201"   "5497128"   "6574462").PN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/03/08<br>14:00 |
| S45 | 0   | ("6965701").URFN.   | USPAT   | OR | ON | 2007/03/08<br>14:00 |
| S46 | 2   | "5465410".pn.   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/12<br>13:59 |
| S47 | 9   | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and (frequency adj3 synthesizer).ti,ab. and control adj2 signal and (limit\$3 or buffer\$3) with square adj3 wave  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/12<br>15:18 |
| S48 | 0   | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and (frequency adj3 synthesizer).ti,ab. and control adj2 signal and non adj integer with multiply\$3   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/12<br>17:44 |
| S49 | 42  | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and (frequency adj3 synthesizer).ti,ab. and control adj2 signal and non adj integer with (multiply\$3 or divid\$3)   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/12<br>17:53 |
| S50 | 0   | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and (frequency adj3 synthesizer).ti,ab. and non adj integer with (multiply\$3)   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/12<br>17:55 |
| S51 | 0   | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and (frequency adj3 synthesizer).ti,ab. and non adj integer with (multipl\$3)  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/12<br>17:57 |
| S52 | 103 | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and (frequency adj3 synthesizer).ti,ab. and frequency near3 module   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/12<br>18:07 |
| S54 | 0   | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and (frequency adj3 synthesizer).ti,ab. and frequency near3 module and non adj integer   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/12<br>18:07 |

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|-----|-----|---|---|----|----|---------------------|
| S55 | 2   | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and (frequency adj3 synthesizer).ti.ab. and frequency near3 modify \$3 and non adj integer           | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/12<br>18:14 |
| S56 | 83  | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and multipl\$4 near4 non adj integer   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/12<br>18:15 |
| S57 | 10  | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and multipl\$4 near4 non adj integer and frequency near3 synthesizer                                 | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/12<br>18:15 |
| S58 | 988 | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and 455/260.ccls.  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/13<br>12:44 |
| S59 | 775 | S58 and (control\$4 near3 signal)   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/13<br>10:18 |
| S60 | 213 | S58 and (control\$4 near3 signal) and (frequency near3 synthesiz\$4).ab.ti.   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/13<br>10:19 |
| S61 | 4   | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and frequency near synthesizer and limit\$3 near3 cross adj coupl \$3                                | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/13<br>11:26 |
| S62 | 124 | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and limit\$3 near3 cross adj coupl\$3  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/06<br>18:39 |
| S63 | 60  | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and 455/260.ccls. and frequency adj3 modif\$8  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/13<br>14:06 |
| S64 | 199 | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and 455/260.ccls. and frequency adj2 synthesiz\$4 and multipl\$7 and divid\$4 and control adj signal | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/13<br>14:34 |
| S65 | 2   | 2002/0039894  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/13<br>15:43 |
| S66 | 6   | 2000-247703   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/13<br>15:43 |

|     |      |   |   |    |    |                     |
|-----|------|---|---|----|----|---------------------|
| S68 | 17   | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and 455/75-76,73,118,119,131,295,296,313-316,205-216,180.3,183.1-187.1,188.1-191.3,255-265. ocls. and non adj integer with multipl\$6        | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/13<br>18:23 |
| S69 | 11   | olip.in.  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/13<br>18:23 |
| S70 | 17   | ("5535247").URPN.   | USPAT   | OR | ON | 2007/03/13<br>18:42 |
| S71 | 10   | "5452290"   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/06<br>18:11 |
| S72 | 19   | "5535247"   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/06<br>18:12 |
| S73 | 0    | "10821531"  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/06<br>18:17 |
| S74 | 1    | "10/821531"   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/06<br>18:18 |
| S75 | 6    | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and "331".clas. and limit\$3 near3 cross adj coupl\$3  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/06<br>18:42 |
| S76 | 8577 | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and ("455".clas. or "331".clas.) and (synthesi\$6 or oscillat\$5).ti.ab. and (synthesi\$6 or oscillat\$5) same switch \$4                    | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/06<br>19:24 |
| S80 | 1105 | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and ("455".clas. or "331".clas.) and (synthesi\$6).ti.ab. and switch \$4 with frequenc\$4 and (pll or phase\$lock\$5 or phase near2 lock\$4) | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/06<br>18:49 |
| S81 | 802  | S80 and (buffer\$4 or limit\$4 or harmon\$4 or cross near coupl\$4) and (divid\$4 or multipl\$6)  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/06<br>18:51 |
| S82 | 486  | S81 and synthesi\$6.ti.   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/06<br>19:15 |

|     |     |   |   |    |    |                     |
|-----|-----|---|---|----|----|---------------------|
| S84 | 409 | S82 and synthe\$6 same switch\$4  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/06<br>19:19 |
| S86 | 48  | S84 and 331/46-56,1r,2.ccls.  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/06<br>19:21 |
| S87 | 209 | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and "331".clas. and harmon\$4 with synthe\$6   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/06<br>19:44 |
| S88 | 46  | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and "331".clas. and harmon\$4 with synthe\$6 with filter\$4                              | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/06<br>19:45 |
| S89 | 385 | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and "331".clas. and harmon\$4 near4 filter\$4  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/06<br>19:45 |
| S90 | 221 | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and "331".clas. and harmon\$4 near4 filter\$4 and switch\$4                              | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/06<br>19:46 |
| S91 | 186 | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and "331".clas. and harmon\$4 near4 filter\$4 and switch\$4 with (output or frequenc\$4) | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/07<br>15:11 |
| S92 | 0   | "10835936"  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/07<br>12:01 |
| S93 | 1   | "10/835936"   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/07<br>12:02 |
| S94 | 10  | ("4105949"   "4134085"   "4379274"   "4516085"   "4733122"   "5016260"   "5332983"   "6005446"   "6028885"   "6549083").PN. OR ("6756863").URFN.    | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/12/07<br>14:29 |
| S95 | 186 | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and "331".clas. and harmon\$4 near4 filter\$4 and switch\$4 with (output or frequenc\$4) | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/07<br>16:38 |
| S96 | 35  | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and "331".clas. and harmon\$4 near4 filter\$4 and switch\$4 not S95                      | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/07<br>15:11 |

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| S97  | 8   | ("4749961"   "5576666"   "5942949"   "6137368"   "6154095"   "6236278"   "6337600"   "6359950").FN. OR ("6822519").URFN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/12/07<br>15:15 |
| S98  | 7   | ("3662287"   "5568098"   "6094158").FN. OR ("6441692").URFN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/12/07<br>15:30 |
| S99  | 12  | ("2648006"   "3694766"   "5150078"   "5259007"   "5281903"   "5343168").FN. OR ("5781600").URFN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/12/07<br>16:02 |
| S100 | 20  | ("3852746"   "3945012"   "4047173"   "4288750"   "4560961"   "4739186"   "5019825").FN. OR ("5428361").URFN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/12/07<br>16:15 |
| S101 | 510 | (@ad   @pt1d   @frpd   @read   @riad   @ptad) < "20040409" and "331".clas. and harmon\$4 and switch\$4 and control\$6 near7 (divid\$4 or multipl\$7)   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/07<br>17:36 |
| S102 | 404 | S101 not S95   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/07<br>16:39 |
| S103 | 254 | (@ad   @pt1d   @frpd   @read   @riad   @ptad) < "20040409" and "331".clas. and (harmon\$4 or cross near1 coupl\$5) and switch\$4 and control\$6 near7 (divid\$4 or multipl\$7) not S102  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/07<br>18:56 |
| S104 | 288 | (@ad   @pt1d   @frpd   @read   @riad   @ptad) < "20040409" and "331".clas. and (harmon\$4 or cross near1 coupl\$5) and (switch\$4 or select\$4) near6 frequenc\$4 and control\$6 near7 (divid\$4 or multipl\$7) not S102   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/07<br>18:57 |
| S105 | 360 | (@ad   @pt1d   @frpd   @read   @riad   @ptad) < "20040409" and "331".clas. and (harmon\$4 or cross near1 coupl\$5) and (switch\$4 or select\$4) near6 frequenc\$4 and (control\$6 or program\$7 or var\$6) near4 (divid\$4 or multipl\$7) not S102                 | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/08<br>13:13 |
| S107 | 406 | (@ad   @pt1d   @frpd   @read   @riad   @ptad) < "20040409" and "455".clas. and (harmon\$4 or cross near1 coupl\$5) near9 filter\$4 and (switch\$4 or select\$4) near6 frequenc\$4 and (control\$6 or program\$7 or var\$6) near4 (divid\$4 or multipl\$7) not S102 | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/07<br>19:22 |
| S109 | 43  | S107 and "331".clas.   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/07<br>19:23 |
| S110 | 37  | ("4234929"   "4963838"   "4994762"   "5048059"   "5073900"   "5095288"   "5111162"   "5129095"   "5180993"   "5187805"   "5289506").FN. OR ("5610559").URFN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/12/08<br>12:18 |
| S111 | 3   | ("4307348"   "4322692"   "4516085").FN. OR ("5237291").URFN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/12/08<br>12:58 |



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| S112 | 186  | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and "331".das. and harmon\$4 near4 filter\$4 and switch\$4 with (output or frequenc\$4)  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/08<br>13:13 |
| S113 | 510  | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and "331".das. and harmon\$4 near4 filter\$4 and control\$6 near7 (divid\$4 or multipl\$7)   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/08<br>13:13 |
| S114 | 404  | S113 not S112   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/08<br>13:13 |
| S115 | 360  | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and "331".das. and (harmon\$4 or cross near1 coupl\$5) and (switch\$4 or select\$4) near6 frequenc\$4 and (control\$6 or program\$7 or var\$6) near4 (divid\$4 or multipl\$7) not S114 | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/08<br>13:13 |
| S116 | 1967 | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and "331".das. and switch\$4 with (divid\$4 or multipl\$7) not S114 not S115   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/08<br>13:14 |
| S117 | 1091 | (@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and "331".das. and switch\$4 with (divid\$4 or multipl\$7) with frequency not S114 not S115  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/08<br>13:15 |
| S118 | 245  | S117 and switch\$4 with (synthesiser or synthesizer)  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/08<br>13:57 |
| S119 | 19   | ("3710274"   "3729688"   "4510461"   "4629999"   "4862296"   "5420545"   "5471661"   "5576666"   "5675292"   "5686864"   "5729179").PN. OR ("6229399").URPN.  | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/12/08<br>13:46 |
| S120 | 134  | S117 and switch\$4 with (synthesiser or synthesizer) with output  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/08<br>13:57 |
| S121 | 0    | S120 not S118   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/12/08<br>13:57 |
| S122 | 12   | ("3332038"   "3379992"   "4659999").PN. OR ("5497128").URPN.  | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/12/08<br>14:06 |
| S123 | 8    | ("4791377"   "5497128"   "5508661"   "6114987"   "6133795"   "6384770"   "6603367").PN. OR ("6842077").URPN.  | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/12/08<br>14:12 |
| S124 | 28   | ("3223925"   "3379992"   "3444320"   "3735269").PN. OR ("4659999").URPN.  | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/12/08<br>14:21 |

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|------|-----|--|---|----|----|---------------------|
| S125 | 19  | ("4086544"   "4659999").PN. OR ("5270669").URFN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/12/08<br>14:28 |
| S126 | 6   | ("5270669"   "5572167"   "5610558").PN. OR ("6163223").URFN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2007/12/08<br>14:31 |
| S127 | 2   | "6163223".pn.  | US-PGPUB;<br>USPAT; FFRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2009/02/12<br>19:45 |
| S128 | 2   | "6509770".pn.  | US-PGPUB;<br>USPAT; FFRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2009/02/13<br>12:28 |
| S129 | 2   | "20040101081".pn.  | US-PGPUB;<br>USPAT; FFRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2009/02/13<br>12:28 |
| S130 | 167 | (@ad   @pt1d   @frpd   @read   @riad   @ptad) < "20040409" and 455/255-265.ccls. and (frequency near4 synthes\$6) with (switch\$4)                           | US-PGPUB;<br>USPAT; FFRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/02/08<br>18:21 |
| S131 | 3   | ("5203032"   "6061575"   "6628927").PN. OR ("6829469").URFN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2010/02/08<br>21:29 |
| S132 | 22  | ("3710274"   "3729688"   "4510461"   "4629999"   "4862296"   "5420545"   "5471661"   "5576666"   "5675292"   "5686864"   "5729179").PN. OR ("6229399").URFN. | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2010/02/08<br>21:53 |
| S134 | 34  | ("4859970"   "5075639"   "5231390"   "5329251"   "5414390").PN. OR ("5610558").URFN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2010/02/08<br>23:00 |
| S135 | 9   | ("20010008384"   "20050135526"   "20050182983"   "5610558"   "6281727"   "6670833"   "6762634"   "6812797"   "7006590").PN. OR ("7602253").URFN.             | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2010/02/08<br>23:03 |
| S136 | 7   | ("5270669"   "5572167"   "5610558").PN. OR ("6163223").URFN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2010/02/08<br>23:23 |
| S137 | 14  | ("3332038"   "3379992"   "4659999").PN. OR ("5497128").URFN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2010/02/08<br>23:38 |
| S138 | 19  | ("4086544"   "4659999").PN. OR ("5270669").URFN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2010/02/08<br>23:53 |
| S139 | 376 | (@ad   @pt1d   @frpd   @read   @riad   @ptad) < "20040409" and 331/17,2,16,18,25,4.ccls. and (frequency near4 synthes\$6) with (switch\$4)                   | US-PGPUB;<br>USPAT; FFRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/02/09<br>10:22 |
| S140 | 3   | ("4307348"   "4322692"   "4516085").PN. OR ("5237291").URFN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2010/02/09<br>12:42 |
| S141 | 4   | 11/324711  | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2010/02/09<br>13:46 |
| S142 | 1   | 11/299502  | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2010/02/09<br>14:27 |
| S143 | 1   | "5579338".pn.  | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2010/02/09<br>14:29 |

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| S144 | 1    | "20040071116".pn.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2010/02/09<br>14:30 |
| S145 | 1    | 11/087170   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2010/02/09<br>18:11 |
| S146 | 1    | "5617472".pn.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2010/02/09<br>18:26 |
| S147 | 0    | ("2005/0227629").URPN.  | USPAT   | OR | ON | 2010/02/11<br>17:38 |
| S148 | 0    | ("2005/0227629").URPN.  | USPAT   | OR | ON | 2010/02/11<br>17:38 |
| S149 | 14   | ("3332038"   "3379992"   "4659999").PN. OR<br>("5497128").URPN.   | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2010/02/11<br>19:59 |
| S150 | 8    | ("4791377"   "5497128"   "5508661"  <br>"6114987"   "6133795"   "6384770"  <br>"6603367").PN. OR ("6842077").URPN.  | US-PGPUB;<br>USPAT; USOCR                                     | OR | ON | 2010/02/11<br>20:13 |
| S151 | 8024 | (@ad   @pt1d   @rpd   @read   @riad  <br>@ptad) < "20040409" and ((switch\$4 select<br>\$5 mux multiplexer) near5 (synthesi\$6 pll\$3 vco<br>\$3 generator oscillat\$6) and (channel) near4<br>(select\$5 switch\$5 tun\$5) and frequency<br>near7 (multi\$6 divid\$5))     | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/02/12<br>09:24 |
| S152 | 332  | (@ad   @pt1d   @rpd   @read   @riad  <br>@ptad) < "20040409" and ((switch\$4 select<br>\$5 mux multiplexer) near5 (synthesi\$6 pll\$3<br>vco\$3 generator oscillat\$6) and (channel)<br>near4 (select\$5 switch\$5 tun\$5) and<br>frequency near7 (multi\$6 divid\$5)).clm. | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/02/12<br>09:24 |
| S153 | 2    | "5125105".pn.   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/02/12<br>17:42 |
| S154 | 2    | "5870666".pn.   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/02/12<br>17:43 |
| S155 | 2    | "4903328".pn.   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/02/12<br>17:44 |
| S156 | 2    | "6957053".pn.   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/02/12<br>17:44 |
| S157 | 9025 | (@ad   @pt1d   @rpd   @read   @riad  <br>@ptad) < "20040409" and ((switch\$4 select<br>\$5 mux multiplexer) near5 (synthesi\$6 pll\$3<br>vco\$3 generator oscillat\$6) and (channel<br>frequency) near4 (select\$5 switch\$5 tun\$5)).<br>clm.                              | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/02/19<br>13:02 |
| S158 | 8917 | (@ad   @pt1d   @rpd   @read   @riad  <br>@ptad) < "20040409" and ((switch\$4 select<br>\$5 mux multiplexer) near5 (synthesi\$6 pll\$3<br>generator oscillat\$6) and (channel frequency)<br>near4 (select\$5 switch\$5 tun\$5)).clm.   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/02/19<br>13:02 |

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|------|------|---|---|----|----|---------------------|
| S159 | 6494 | ((@ad   @pt1d   @frpd   @read   @rlad   @ptad) < "20040409" and ((switch\$4 select \$5 mux multiplexer) near3 (synthesi\$6 pll\$3 generator oscillat\$6) and (channel frequency) near4 (select\$5 switch\$5 tun\$5)).clm. | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/02/19<br>13:03 |
| S160 | 2449 | S159 and ("331".clas. "455".clas. "375".clas.)  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/02/19<br>13:03 |

**EAST Search History (Interference)**

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**2/ 26/ 2010 9:37:56 PM****C:\Documents and Settings\rhu\My Documents\EAST\Workspaces\10821531--high agility fre syn pll.wsp**